

MULTIMEDIA



UNIVERSITY

STUDENT ID NO

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# MULTIMEDIA UNIVERSITY

## FINAL EXAMINATION

TRIMESTER 1, 2018/2019

**TSE2251/TIS2211 -SYSTEMS ANALYSIS AND DESIGN**  
(All sections / Groups)

15 OCTOBER 2018  
9AM-11AM  
(2 Hours)

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### INSTRUCTIONS TO STUDENTS

1. This Question paper consists of 4 pages including this cover page.
2. This Question paper contains **Five** questions of **10** marks each. Answer **ALL** questions.
3. The distribution of marks for each question is given.
4. Write all your answers in the Answer Booklet provided.

**Question 1**

- (a) Briefly describe with a diagram the salient features involved in the 'Rapid Application Development' method. (3 marks)
- (b) Explain THREE drawbacks with the traditional system development life cycle methodology. (3 marks)
- (c) Give FOUR characteristics to compare and contrast the transaction processing systems with management information systems systems. (4 marks)

**Question 2**

- (a) List any THREE activities performed by a manager during the project initiation phase. (3 marks)
- (b) The time taken for each activity and the predecessors for a project with 12 activities are shown in the following table.

No	Activity	Time (weeks)	Immediate Predecessors
A	Collect requirements	7	-
B	Analyze processes	6	A
C	Analyze data	9	B
D	Build Models	9	C
E	Design processes	12	B
F	Design data	14	D, E
G	Design screens	5	C
H	Design reports	6	F
I	Program	8	G, H
J	Test	7	G
K	Document & Training	8	I, J
L	Install	2	K

- (i) Draw the network diagram. (2 marks)
- (ii) Calculate Earliest completion time (ECT) and Late completion time (LCT) for each activity. (4 marks)
- (iii) List the activities which are on the critical path. (1 mark)

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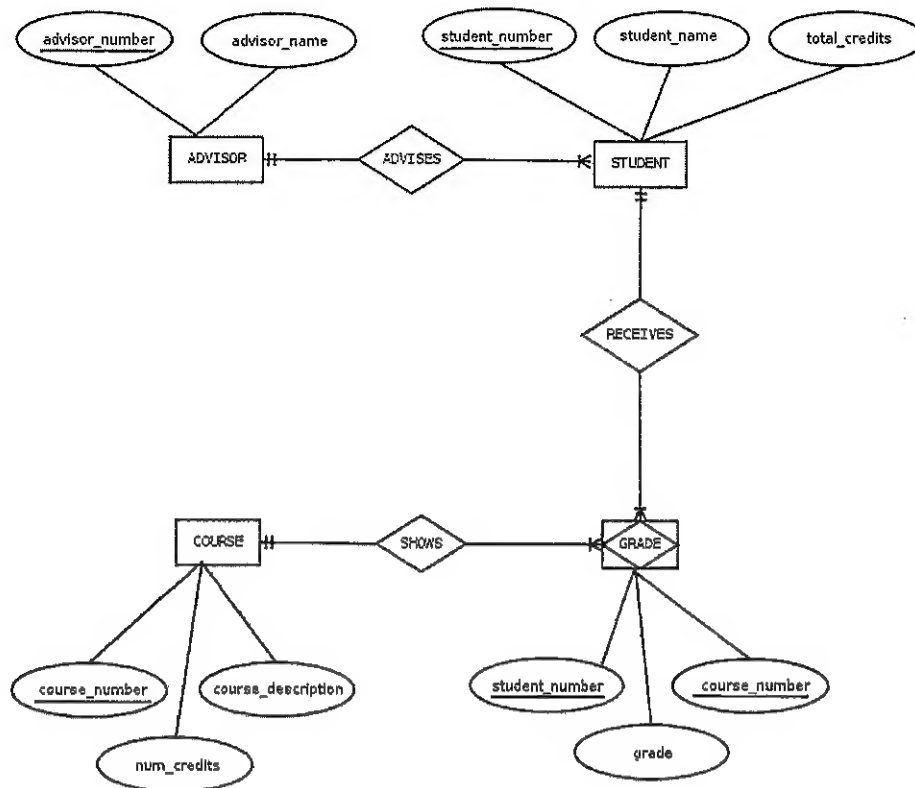
**Question 3**

- (a) Describe any THREE methods of interacting with a system. (3 marks)
- (b) Contrast data modeling to process modeling and logic modeling. (3 marks)
- (c) Assuming monetary benefits of an information system at RM50,000 per year, one-time costs of RM80,000, recurring costs of RM40,000 per year, a discount rate of 12 percent, calculate the Net Present Value of the benefits of this information system after (i) 4 years and (ii) 5 years (4 marks)

**Question 4**

- (a) Draw the context DFD diagram for an 'Employee Hiring System' which receives applications from job seekers and sends them to the Manager for evaluation. After getting the evaluation reports from the Manager, it informs the applicants about the interview schedule and also the decision letter after the interview. (3 marks)
- (b) In the following relation, Emp-ID and Course are primary key attributes. State with reason whether the following relation is in second normal form. If it is not in second normal form convert it into second normal form.
- EMPLOYEE (Emp-ID, Name, Department, Salary, Course, Date\_Completed) (3 marks)
- (c) Transform the E-R Diagram shown below into a set of 3NF relations. (4 marks)

**Continue...**



### Question 5

- (a) Define the term: Usability of a system. Mention THREE methods for assessing the usability. (3 marks)
- (b) Mention the SIX factors that influence the success of the implementation of an information system (3 marks)
- (c) What is configuration management of information systems. Define the following terms which are used in the configuration management.
- (i) Baseline modules
  - (ii) Build routines

(4 marks)

**End of QP**

